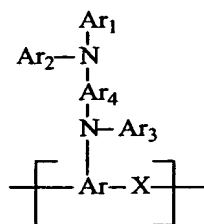


**CLAIMS:**

1. An electroluminescent device, comprising:
    - a) a spaced-apart anode and cathode; and
    - b) an organic layer disposed between the spaced-apart anode
- 5 and cathode and including a polymer having arylamine repeating unit moiety represented by formula

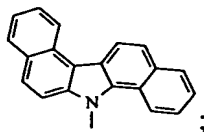
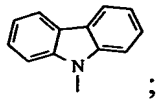


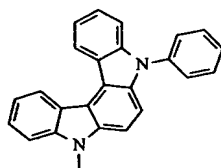
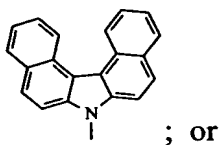
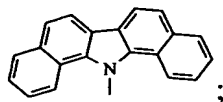
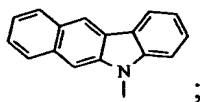
10 wherein:

Ar, Ar<sub>1</sub>, Ar<sub>2</sub>, Ar<sub>3</sub>, and Ar<sub>4</sub> are each individually aryl group of from 6 to 60 carbon atoms; or a heteroaryl group of from 4 to 60 carbons, or combinations thereof; or Ar<sub>1</sub> and Ar<sub>2</sub>, Ar<sub>3</sub> and Ar<sub>4</sub>, Ar<sub>1</sub> and Ar<sub>4</sub>, Ar<sub>2</sub> and Ar<sub>4</sub> are connected through a chemical bond; and

15 X is a conjugated group having 2 to 60 carbon atoms.

2. The electroluminescent device of claim 1 wherein Ar<sub>1</sub> and Ar<sub>2</sub>, Ar<sub>3</sub> and Ar<sub>4</sub>, Ar<sub>1</sub> and Ar<sub>4</sub>, Ar<sub>2</sub> and Ar<sub>4</sub> are connected by a chemical bond to form a group having  $-\overset{\text{Ar}_1}{\underset{|}{\text{N}}}-\text{Ar}_2$ ,  $-\overset{\text{Ar}_3}{\underset{|}{\text{N}}}-\text{Ar}_4$ ,  $-\overset{\text{Ar}_1}{\underset{|}{\text{N}}}-\text{Ar}_4$ , or  $-\overset{\text{Ar}_1}{\underset{|}{\text{N}}}-\text{Ar}_4$  that includes the following carbazole and carbazole derivatives:

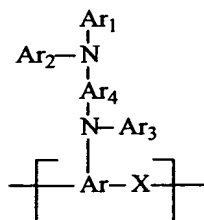




3. The electroluminescent device of claim 1 wherein X includes a plurality of groups.

4. The electroluminescent device of claim 1 wherein the organic layer is an emissive layer or a hole injection layer or both.

5. An electroluminescent device which includes an anode, a cathode, and a polymer disposed between the spaced-apart anode and cathode, the polymer being doped with one or more fluorescent dyes, phosphorescent dopants, or other light emitting material, the polymer including arylamine moiety has the repeating unit represented by formula



wherein:

Ar, Ar<sub>1</sub>, Ar<sub>2</sub>, Ar<sub>3</sub>, and Ar<sub>4</sub> are each individually aryl group of from 6 to 60 carbon atoms; or a heteroaryl group of from 4 to 60 carbons, or combinations thereof; or Ar<sub>1</sub> and Ar<sub>2</sub>, Ar<sub>3</sub> and Ar<sub>4</sub>, Ar<sub>1</sub> and Ar<sub>4</sub>, Ar<sub>2</sub> and Ar<sub>4</sub> are connected through a chemical bond; and

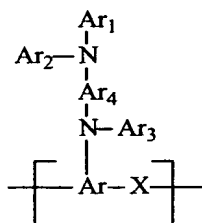
5 X is a conjugated group of from 2 to 60 carbon atoms.

6. A method of making an electroluminescent device, comprising:

a) providing an anode and cathode; and

b) depositing an organic layer between the spaced-apart anode

10 and cathode and including a polymer having arylamine moiety has the repeating unit represented formula



wherein:

15 Ar, Ar<sub>1</sub>, Ar<sub>2</sub>, Ar<sub>3</sub>, and Ar<sub>4</sub> are each individually aryl group of from 6 to 60 carbon atoms; or a heteroaryl group of from 4 to 60 carbons, or combinations thereof; or Ar<sub>1</sub> and Ar<sub>2</sub>, Ar<sub>3</sub> and Ar<sub>4</sub>, Ar<sub>1</sub> and Ar<sub>4</sub>, Ar<sub>2</sub> and Ar<sub>4</sub> are connected through a chemical bond; and

X is a conjugated group of from 2 to 60 carbon atoms.

20 7. The electroluminescent device of claim 6 wherein the organic layer is an emissive layer or a hole injection layer or both.